

IN THE CLAIMS

1. (Original) A peeling-off method of a resist film on an Si-C based film that has been formed on a substrate comprising:

a preparing step of preparing an organic solvent as a release agent, and
an applying step of applying the organic solvent to the resist film.

2. (Original) A peeling-off method of a resist film according to claim 1, wherein
the Si-C based film is a film having an antireflection function and a hard-mask function,
and

the applying step is carried out without deteriorating the antireflection function and the
hard-mask function of the Si-C based film.

3. (Currently Amended) A peeling-off method of a resist film according to claim 1 ~~or 2~~, wherein
the organic solvent is a thinner.

4. (Currently Amended) A peeling-off method of a resist film according to claim 1 ~~3~~, wherein
the organic solvent is an acetone-based thinner.

5. (Currently Amended) A peeling-off method of a resist film according to claim 1 ~~any of claims 1 to 4~~, wherein

the applying step is carried out by supplying the release agent onto the resist film with
rotating the substrate.

6. (Currently Amended) A peeling-off method of a resist film according to claim 1 ~~any of claims 1 to 4~~, wherein

the applying step is carried out by dipping the substrate into the release agent.

7. (Original) A reworking method of a resist film comprising:

a peeling-off step of peeling-off a resist film on an Si-C based film that has been formed on a substrate, and

a reworking step of forming another resist film again on the Si-C based film,

wherein

the peeling-off step includes

a preparing step of preparing an organic solvent as a release agent, and

an applying step of applying the organic solvent to the resist film.

8. (Original) A reworking method of a resist film according to claim 7, wherein

the Si-C based film is a film having an antireflection function and a hard-mask function, and

the applying step is carried out without deteriorating the antireflection function and the hard-mask function of the Si-C based film.

9. (Currently Amended) A reworking method of a resist film according to claim 7 ~~or 8~~, wherein the organic solvent is a thinner.

10. (Currently Amended) A reworking method of a resist film according to claim 7 ~~9~~, wherein the organic solvent is an acetone-based thinner.

11. (Currently Amended) A reworking method of a resist film according to claim 7 ~~any of claims 7 to 10~~, wherein

the applying step is carried out by supplying the release agent onto the resist film with rotating the substrate.

12. (Currently Amended) A reworking method of a resist film according to claim 7 ~~any of claims 7 to 10~~, wherein

the applying step is carried out by dipping the substrate into the release agent.

13. (Original) A processing method of a substrate comprising:

a step of forming an Si-C based film and a resist film in turn on an objective film to be etched that has been formed on a substrate,

a first etching step of etching the Si-C based film making use of the resist film as a mask,

a second etching step of etching the objective film to be etched making use of the resist film and the Si-C based film as a mask, and

a peeling-off step of peeling-off the resist film at a desired timing,

wherein

the peeling-off step includes

a preparing step of preparing an organic solvent as a release agent, and

an applying step of applying the organic solvent to the resist film.

14. (Original) A processing method of a substrate according to claim 13, wherein

the Si-C based film is a film having an antireflection function and a hard-mask function, and

the applying step is carried out without deteriorating the antireflection function and the hard-mask function of the Si-C based film.

15. (Currently Amended) A processing method of a substrate according to claim 13 ~~or 14~~, wherein

the organic solvent is a thinner.

16. (Currently Amended) A processing method of a substrate according to claim 13 ~~15~~, wherein the organic solvent is an acetone-based thinner.

17. (Currently Amended) A processing method of a substrate according to claim 13 ~~any of claims 13 to 16~~, wherein

the applying step is carried out by supplying the release agent onto the resist film with rotating the substrate.

18. (Currently Amended) A processing method of a substrate according to claim 13 ~~any of claims 13 to 16~~, wherein

the applying step is carried out by dipping the substrate into the release agent.

19. (Currently Amended) A processing method of a substrate according to claim 13 ~~any of claims 13 to 18~~, wherein

after the peeling-off step, a reworking step of forming another resist film again on the Si-C based film is carried out.

20. (Original) A processing method of a substrate according to claim 19, wherein

the peeling-off step and the reworking step are carried out before the first etching step.

21. (Original) A peeling-off apparatus for peeling-off a resist film on an Si-C based film that has been formed on a substrate comprising:

a spin chuck that rotatably supports the substrate on which the resist film to be peeled off has been formed, and

a nozzle that ejects an organic solvent as a release agent toward the substrate held by the spin chuck.

22. (Original) A reworking apparatus of a resist film for peeling-off a resist film on an Si-C based film that has been formed on a substrate and for applying a next resist film comprising:

a spin chuck that rotatably supports the substrate on which the resist film to be peeled off has been formed,

an organic-solvent nozzle that ejects an organic solvent as a release agent toward the substrate held by the spin chuck, and

a resist-liquid nozzle that ejects a resist liquid toward the substrate held by the spin chuck.

23. (Original) A reworking apparatus of a resist film comprising:

a peeling-off apparatus that peels off a resist film on an Si-C based film that has been formed on a substrate, and

a resist-applying apparatus that applies a next resist film on the Si-C based film of the substrate from which the resist film has been peeled off.